

## Product datasheet for **TR713970**

### Ago1 Rat shRNA Plasmid (Locus ID 313594)

#### Product data:

**Product Type:** shRNA Plasmids

**Product Name:** Ago1 Rat shRNA Plasmid (Locus ID 313594)

**Locus ID:** 313594

**Synonyms:** Eif2c1

**Vector:** pRS (TR20003)

**E. coli Selection:** Ampicillin

**Mammalian Cell Selection:** Puromycin

**Format:** Retroviral plasmids

**Components:** Ago1 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID = 313594). 5µg purified plasmid DNA per construct  
29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

**RefSeq:** [NM\\_001191765](#), [NM\\_001191765.2](#), [NM\\_001191765.1](#)

**Summary:** This gene encodes a member of the argonaute family of proteins, which associate with small RNAs and have important roles in RNA interference (RNAi) and RNA silencing. This protein binds to microRNAs (miRNAs) or small interfering RNAs (siRNAs) and represses translation of mRNAs that are complementary to them. It is also involved in transcriptional gene silencing (TGS) of promoter regions that are complementary to bound short antisenRNA (agRNAs), as well as in the degradation of miRNA-bound mRNA targets. A recent study showed this gene to be an authentic stop codon readthrough target, and that its mRNA could give rise to a C-terminally extended isoform by use of an alternative in-frame translation termination codon. [provided by RefSeq, Nov 2015]

**shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).



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**Performance  
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).